



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/532,995	11/18/2005	Kiyoshi Yagi	Q87740	9113
65565	7590	12/03/2009		
SUGHRUE-265550				
2100 PENNSYLVANIA AVE. NW				
WASHINGTON, DC 20037-3213				
EXAMINER				
NERANGIS, VICKIE MARIE				
ART UNIT		PAPER NUMBER		
1796				
NOTIFICATION DATE		DELIVERY MODE		
12/03/2009		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

SUGHRUE265550@SUGHRUE.COM

USPTO@SUGHRUE.COM

PPROCESSING@SUGHRUE.COM

### Office Action Summary

**Application No.**

10/532,995

**Applicant(s)**

YAGI ET AL.

**Examiner**

Vickey Nerangis

**Art Unit**

1796

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/22)  
Paper No(s)/Mail Date \_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_

***SUPPLEMENTAL OFFICE ACTION***

To clarify inadvertent typographical errors made in the Office action mailed 10/26/2009, a supplemental Office action is given. A complete list of all rejections is recited below. Corrections were made in paragraphs 6-9 below. The paragraph numbers listed below correspond to the paragraph numbers in the Office action mailed 10/26/2009.

***Claim Rejections - 35 USC § 102***

4. Claims 1, 4, and 8 are rejected under 35 U.S.C. 102(e) as being anticipated by Ittel (US 2005/0058822).

Ittel discloses a fiber-reinforce thermoplastic matrix comprising a polyolefin-containing thermoplastic matrix, synthetic fiber such as polyamide and nylon fibers, and magnesium hydroxide and/or silica (claims 1, 3, and 5). The composition is used to prepare an article such as electrical casing (claim 21).

In light of the above, it is clear that Ittel anticipates the presently cited claims.

Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

***Claim Rejections - 35 USC § 103***

5. Claims 1 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Metzemacher (US 5,827,906).

Metzemacher discloses a composition for use with cable (col. 1, line 25) comprising magnesium hydroxide surface), polymer such as thermoplastic olefins (col. 10, line 44), and optionally polyamide fibers (col. 3, line 55).

Metzemacher fails to exemplify a composition with said optional polyamide fibers.

Even so, it would have been obvious to one of ordinary skill in the art to utilize polyamide fibers in the composition taught by Metzemacher given that Metzemacher teaches that suitability of such fibers in its composition.

6. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP '570 (JP 11-106570, full English-language translation) in view of Metzemacher (US 5,827,906).

JP '570 discloses a resin composition comprising a polyolefin-polyamide resin composition that is mixed with rubber or resin as reinforcement (paragraph 0001), wherein the polyolefin-polyamide resin composition comprises 90-40 parts by weight (pbw) polyolefin, 10-60 pbw polyamide fibers having an average fiber diameter of 1 micron or less and an aspect ratio of 20-1,000, and 0.1-5.5 pbw per 100 pbw, per total of polyolefin and polyamide, silane coupling agent (abstract). Note Table 2 which has the polyolefin-polyamide resin composition mixed with NBR (nitrile butadiene rubber) or PE (polyethylene).

JP '570 fails to disclose the use of magnesium hydroxide in the composition, however, it is open to the use of other additives such as fillers (paragraph 0025).

Metzemacher discloses a composition comprising thermoplastic polyolefins, polyamide fibers, and magnesium hydroxide (see discussion in paragraph 5 above), wherein the magnesium hydroxide is used to impart flame retardance to polyolefin composition.

Given that JP '570 is open to the use of additives and further given that Metzemacher teaches that magnesium hydroxide is advantageously and successfully added to polyolefin compositions containing polyamide fiber in order to impart flame retardance, it would have been obvious to one of ordinary skill in the art to add magnesium hydroxide to the composition of JP '570.

7. Claims 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP '570 (JP 11-106570, full English-language translation) in view of Metzemacher (US 5,827,906) and further in view of Sugiyama (US 4,082,909).

The discussion with respect to JP '570 and Metzemacher in paragraph 6 above is incorporated here by reference.

JP '570 discloses the use of a filler such as "white carbon," but fails to exemplify or teach the use of silica.

Sugiyama et al teaches that silica is also known as "white carbon" (col. 2, lines 26-27).

Given that JP '570 teaches the use of a white carbon filler which is equivalent to silica as taught by Sugiyama et al, it would have been obvious to one of ordinary skill in the art utilize silica in the polyolefin-polyamide resin composition taught by JP '570.

8. Claims 1, 2, and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP '464 (JP 11-302464, machine translation) in view of JP '963 (JP 2000-344963).

JP '464 discloses a resin composition for use in electric wire (paragraph 0001) comprising 90-99 wt % polyolefin and 1-10 wt % polyamide fiber having an average fiber

diameter of 1 micron or less and an aspect ratio of 20-1,000 (paragraph 0017), and silane coupling agent (abstract).

JP '464 fails to disclose the use of magnesium hydroxide in the composition, however, it is open to the use of other additives such as fillers (paragraph 0026).

JP '963 discloses a polyolefin resin composition for use in a sheath of electric wires and teaches that flame-retardant inorganic particles such as magnesium hydroxide is useful (abstract).

Given that JP '464 discloses a composition suitable for use in electric wire that is open to other additives such as fillers and further given that JP '963 teaches polyolefin composition for use as sheath of electric wires advantageously includes magnesium hydroxide as flame retardant, it would have been obvious to one of ordinary skill in the art to utilize magnesium hydroxide in the resin composition of JP '464.

9. Claims 4-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP '464 (JP 11-302464, machine translation) in view of JP '963 (JP 2000-344963) and further in view of Sugiyama (US 4,082,909).

The discussion with respect to JP '464 and JP '963 in paragraph 8 above is incorporated here by reference.

JP '464 discloses the use of a filler such as "white carbon" (paragraph 0026) but fails to exemplify or teach the use of silica.

Sugiyama et al teaches that silica is also known as "white carbon" (col. 2, lines 26-27).

Given that JP '464 teaches the use of a white carbon filler which is equivalent to silica as taught by Sugiyama et al, it would have been obvious to one of ordinary skill in the art utilize silica in the composition taught by JP '464 and JP '963.

### ***Double Patenting***

10. Claims 1-6 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 7, 13, and 14 of copending Application No. 10/533,159 (published as US 2006/0241221).

US appl. '159 claims a method of producing a polyolefin resin composition, wherein the composition comprises polyolefin and polyamide ultrafine fibers-dispersed polyolefin resin composition comprising silica particles in a ratio of polyolefin to polyamide of 1:1 to 9:1 and a silane coupling agent.

US appl. '159 fails to claim a magnesium hydroxide, however, the claims of US appl. '159 due to open claim language "comprises" and page 20 of the specification of US appl. '159 teaches that magnesium hydroxide can be added. Case law holds that those portions of the specification which provide support for the patent claims may also be examined and considered when addressing the issue of whether a claim in an application defines an obvious variation of an invention claimed in the patent. *In re Vogel*, 422 F.2d 438, 164 USPQ 619,622 (CCPA 1970). Therefore, it would have been obvious to one of ordinary skill in the art to add magnesium hydroxide to the claims of US appl. '159.

11. Applicant's statement on page 5 of the amendment filed 8/10/2009 regarding the provisional obviousness-type double patenting rejections is acknowledged. If the following double-patenting rejection is the only rejection remaining in this application and if there is a provisional obviousness-type double patenting rejection in the later-filed copending application, per USPTO practice, the examiner will withdraw the rejection. See MPEP 804 (I) (B).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vickey Nerangis whose telephone number is (571) 272-2701. The examiner can normally be reached on Monday - Friday, 8:30 a.m. - 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

vn

/Vickey Nerangis/



Application/Control Number: 10/532,995

Page 8

Art Unit: 1796

Primary Examiner, Art Unit 1796